

FIG 2

The diagram shows a circuit with several transistors. At the top, a node is connected to a voltage source V_V . Below this, there are two stages of P-channel MOSFETs. The first stage has two P-MOSFETs, labeled 14 and 15, with their gates connected to a common node. The second stage has two P-MOSFETs, labeled 20 and 21, also with their gates connected to the same common node. A third P-MOSFET, labeled 12, has its gate connected to the output of the first stage (the node between 14 and 15). The output of the second stage (the node between 20 and 21) is connected to the gate of a third P-MOSFET, labeled 22. The output of the third stage (the node between 22 and 23) is connected to the gate of a fourth P-MOSFET, labeled 13. The output of the fourth stage (the node between 13 and 17) is connected to the gate of a fifth P-MOSFET, labeled 15. The output of the fifth stage (the node between 15 and 16) is connected to the gate of a sixth P-MOSFET, labeled 12. The output of the sixth stage (the node between 12 and 18) is connected to the gate of a seventh P-MOSFET, labeled 14. The output of the seventh stage (the node between 14 and 19) is connected to the gate of an eighth P-MOSFET, labeled 20. The output of the eighth stage (the node between 20 and 21) is connected to the gate of a ninth P-MOSFET, labeled 22. The output of the ninth stage (the node between 22 and 23) is connected to the gate of a tenth P-MOSFET, labeled 24. The output of the tenth stage (the node between 24 and 25) is connected to the gate of an eleventh P-MOSFET, labeled 26. The output of the eleventh stage (the node between 26 and 27) is connected to the gate of a twelfth P-MOSFET, labeled 28. The output of the twelfth stage (the node between 28 and 29) is connected to the gate of a thirteenth P-MOSFET, labeled 30. The output of the thirteenth stage (the node between 30 and 31) is connected to the gate of a fourteenth P-MOSFET, labeled 32. The output of the fourteenth stage (the node between 32 and 33) is connected to the gate of a fifteenth P-MOSFET, labeled 34. The output of the fifteenth stage (the node between 34 and 35) is connected to the gate of a sixteenth P-MOSFET, labeled 36. The output of the sixteenth stage (the node between 36 and 37) is connected to the gate of a seventeenth P-MOSFET, labeled 38. The output of the seventeenth stage (the node between 38 and 39) is connected to the gate of an eighteenth P-MOSFET, labeled 40. The output of the eighteenth stage (the node between 40 and 41) is connected to the gate of a nineteenth P-MOSFET, labeled 42. The output of the nineteenth stage (the node between 42 and 43) is connected to the gate of a twentieth P-MOSFET, labeled 44. The output of the twentieth stage (the node between 44 and 45) is connected to the gate of a twenty-first P-MOSFET, labeled 46. The output of the twenty-first stage (the node between 46 and 47) is connected to the gate of a twenty-second P-MOSFET, labeled 48. The output of the twenty-second stage (the node between 48 and 49) is connected to the gate of a twenty-third P-MOSFET, labeled 50. The output of the twenty-third stage (the node between 50 and 51) is connected to the gate of a twenty-fourth P-MOSFET, labeled 52. The output of the twenty-fourth stage (the node between 52 and 53) is connected to the gate of a twenty-fifth P-MOSFET, labeled 54. The output of the twenty-fifth stage (the node between 54 and 55) is connected to the gate of a twenty-sixth P-MOSFET, labeled 56. The output of the twenty-sixth stage (the node between 56 and 57) is connected to the gate of a twenty-seventh P-MOSFET, labeled 58. The output of the twenty-seventh stage (the node between 58 and 59) is connected to the gate of a twenty-eighth P-MOSFET, labeled 60. The output of the twenty-eighth stage (the node between 60 and 61) is connected to the gate of a twenty-ninth P-MOSFET, labeled 62. The output of the twenty-ninth stage (the node between 62 and 63) is connected to the gate of a thirtieth P-MOSFET, labeled 64. The output of the thirtieth stage (the node between 64 and 65) is connected to the gate of a thirty-first P-MOSFET, labeled 66. The output of the thirty-first stage (the node between 66 and 67) is connected to the gate of a thirty-second P-MOSFET, labeled 68. The output of the thirty-second stage (the node between 68 and 69) is connected to the gate of a thirty-third P-MOSFET, labeled 70. The output of the thirty-third stage (the node between 70 and 71) is connected to the gate of a thirty-fourth P-MOSFET, labeled 72. The output of the thirty-fourth stage (the node between 72 and 73) is connected to the gate of a thirty-fifth P-MOSFET, labeled 74. The output of the thirty-fifth stage (the node between 74 and 75) is connected to the gate of a thirty-sixth P-MOSFET, labeled 76. The output of the thirty-sixth stage (the node between 76 and 77) is connected to the gate of a thirty-seventh P-MOSFET, labeled 78. The output of the thirty-seventh stage (the node between 78 and 79) is connected to the gate of a thirty-eighth P-MOSFET, labeled 80. The output of the thirty-eighth stage (the node between 80 and 81) is connected to the gate of a thirty-ninth P-MOSFET, labeled 82. The output of the thirty-ninth stage (the node between 82 and 83) is connected to the gate of a fortieth P-MOSFET, labeled 84. The output of the fortieth stage (the node between 84 and 85) is connected to the gate of a forty-first P-MOSFET, labeled 86. The output of the forty-first stage (the node between 86 and 87) is connected to the gate of a forty-second P-MOSFET, labeled 88. The output of the forty-second stage (the node between 88 and 89) is connected to the gate of a forty-third P-MOSFET, labeled 90. The output of the forty-third stage (the node between 90 and 91) is connected to the gate of a forty-fourth P-MOSFET, labeled 92. The output of the forty-fourth stage (the node between 92 and 93) is connected to the gate of a forty-fifth P-MOSFET, labeled 94. The output of the forty-fifth stage (the node between 94 and 95) is connected to the gate of a forty-sixth P-MOSFET, labeled 96. The output of the forty-sixth stage (the node between 96 and 97) is connected to the gate of a forty-seventh P-MOSFET, labeled 98. The output of the forty-seventh stage (the node between 98 and 99) is connected to the gate of a forty-eighth P-MOSFET, labeled 100. The output of the forty-eighth stage (the node between 100 and 101) is connected to the gate of a forty-ninth P-MOSFET, labeled 102. The output of the forty-ninth stage (the node between 102 and 103) is connected to the gate of a fiftieth P-MOSFET, labeled 104. The output of the fiftieth stage (the node between 104 and 105) is connected to the gate of a fifty-first P-MOSFET, labeled 106. The output of the fifty-first stage (the node between 106 and 107) is connected to the gate of a fifty-second P-MOSFET, labeled 108. The output of the fifty-second stage (the node between 108 and 109) is connected to the gate of a fifty-third P-MOSFET, labeled 110. The output of the fifty-third stage (the node between 110 and 111) is connected to the gate of a fifty-fourth P-MOSFET, labeled 112. The output of the fifty-fourth stage (the node between 112 and 113) is connected to the gate of a fifty-fifth P-MOSFET, labeled 114. The output of the fifty-fifth stage (the node between 114 and 115) is connected to the gate of a fifty-sixth P-MOSFET, labeled 116. The output of the fifty-sixth stage (the node between 116 and 117) is connected to the gate of a fifty-seventh P-MOSFET, labeled 118. The output of the fifty-seventh stage (the node between 118 and 119) is connected to the gate of a fifty-eighth P-MOSFET, labeled 120. The output of the fifty-eighth stage (the node between 120 and 121) is connected to the gate of a fifty-ninth P-MOSFET, labeled 122. The output of the fifty-ninth stage (the node between 122 and 123) is connected to the gate of a sixtieth P-MOSFET, labeled 124. The output of the sixtieth stage (the node between 124 and 125) is connected to the gate of a sixty-first P-MOSFET, labeled 126. The output of the sixty-first stage (the node between 126 and 127) is connected to the gate of a sixty-second P-MOSFET, labeled 128. The output of the sixty-second stage (the node between 128 and 129) is connected to the gate of a sixty-third P-MOSFET, labeled 130. The output of the sixty-third stage (the node between 130 and 131) is connected to the gate of a sixty-fourth P-MOSFET, labeled 132. The output of the sixty-fourth stage (the node between 132 and 133) is connected to the gate of a sixty-fifth P-MOSFET, labeled 134. The output of the sixty-fifth stage (the node between 134 and 135) is connected to the gate of a sixty-sixth P-MOSFET, labeled 136. The output of the sixty-sixth stage (the node between 136 and 137) is connected to the gate of a sixty-seventh P-MOSFET, labeled 138. The output of the sixty-seventh stage (the node between 138 and 139) is connected to the gate of a sixty-eighth P-MOSFET, labeled 140. The output of the sixty-eighth stage (the node between 140 and 141) is connected to the gate of a sixty-ninth P-MOSFET, labeled 142. The output of the sixty-ninth stage (the node between 142 and 143) is connected to the gate of a seventieth P-MOSFET, labeled 144. The output of the seventieth stage (the node between 144 and 145) is connected to the gate of a seventy-first P-MOSFET, labeled 146. The output of the seventy-first stage (the node between 146 and 147) is connected to the gate of a seventy-second P-MOSFET, labeled 148. The output of the seventy-second stage (the node between 148 and 149) is connected to the gate of a seventy-third P-MOSFET, labeled 150. The output of the seventy-third stage (the node between 150 and 151) is connected to the gate of a seventy-fourth P-MOSFET, labeled 152. The output of the seventy-fourth stage (the node between 152 and 153) is connected to the gate of a seventy-fifth P-MOSFET, labeled 154. The output of the seventy-fifth stage (the node between 154 and 155) is connected to the gate of a seventy-sixth P-MOSFET, labeled 156. The output of the seventy-sixth stage (the node between 156 and 157) is connected to the gate of a seventy-seventh P-MOSFET, labeled 158. The output of the seventy-seventh stage (the node between 158 and 159) is connected to the gate of a seventy-eighth P-MOSFET, labeled 160. The output of the seventy-eighth stage (the node between 160 and 161) is connected to the gate of a seventy-ninth P-MOSFET, labeled 162. The output of the seventy-ninth stage (the node between 162 and 163) is connected to the gate of an eightieth P-MOSFET, labeled 164. The output of the eightieth stage (the node between 164 and 165) is connected to the gate of an eighty-first P-MOSFET, labeled 166. The output of the eighty-first stage (the node between 166 and 167) is connected to the gate of an eighty-second P-MOSFET, labeled 168. The output of the eighty-second stage (the node between 168 and 169) is connected to the gate of an eighty-third P-MOSFET, labeled 170. The output of the eighty-third stage (the node between 170 and 171) is connected to the gate of an eighty-fourth P-MOSFET, labeled 172. The output of the eighty-fourth stage (the node between 172 and 173) is connected to the gate of an eighty-fifth P-MOSFET, labeled 174. The output of the eighty-fifth stage (the node between 174 and 175) is connected to the gate of an eighty-sixth P-MOSFET, labeled 176. The output of the eighty-sixth stage (the node between 176 and 177) is connected to the gate of an eighty-seventh P-MOSFET, labeled 178. The output of the eighty-seventh stage (the node between 178 and 179) is connected to the gate of an eighty-eighth P-MOSFET, labeled 180. The output of the eighty-eighth stage (the node between 180 and 181) is connected to the gate of an eighty-ninth P-MOSFET, labeled 182. The output of the eighty-ninth stage (the node between 182 and 183) is connected to the gate of a ninetieth P-MOSFET, labeled 184. The output of the ninetieth stage (the node between 184 and 185) is connected to the gate of a hundredth P-MOSFET, labeled 186. The output of the hundredth stage (the node between 186 and 187) is connected to the gate of a hundred and first P-MOSFET, labeled 188. The output of the hundred and first stage (the node between 188 and 189) is connected to the gate of a hundred and second P-MOSFET, labeled 190. The output of the hundred and second stage (the node between 190 and 191) is connected to the gate of a hundred and third P-MOSFET, labeled 192. The output of the hundred and third stage (the node between 192 and 193) is connected to the gate of a hundred and fourth P-MOSFET, labeled 194. The output of the hundred and fourth stage (the node between 194 and 195) is connected to the gate of a hundred and fifth P-MOSFET, labeled 196. The output of the hundred and fifth stage (the node between 196 and 197) is connected to the gate of a

FIG 3

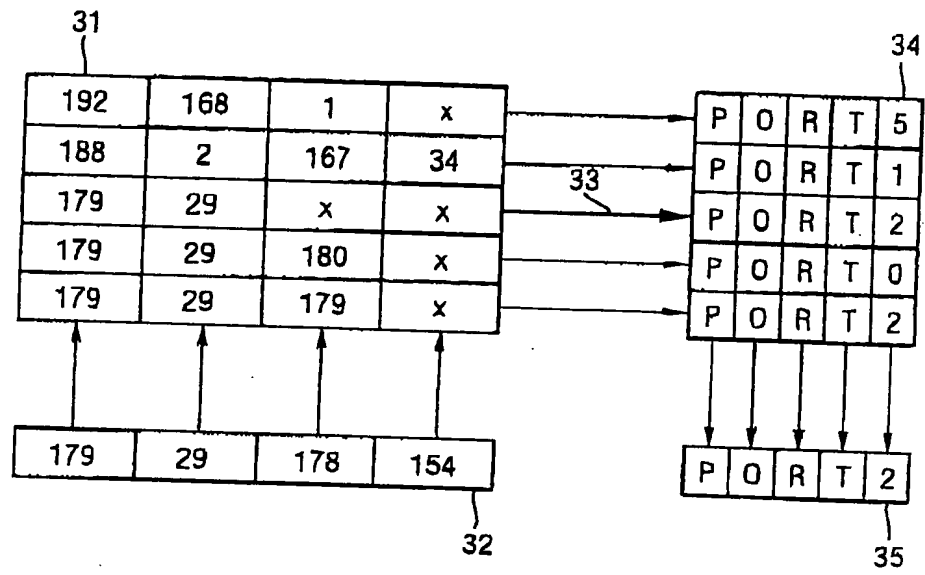


FIG 4

